

Appl. No. : 10/748,869
Filed : December 30, 2003

AMENDMENTS TO THE CLAIMS

1. **(Currently amended)** A dental implant system, comprising:

~~an a~~ dental implant including a body portion and an abutment portion that is integrally formed with the body portion, the implant body portion located at a distal end and configured to lie at least partially below a crest of a patient's jawbone, the abutment portion located at a proximate end of the implant and configured to lie at least partially above the crest of the patient's jawbone, the abutment portion comprising a flared portion, a shoulder portion and a final restoration portion, the shoulder portion lying between the flared portion and the final restoration portion, the dental implant further including a bore that extends generally along the longitudinal axis of the dental implant from a top surface of the abutment portion, the bore including an notch configured to releasably receive prongs on a mating component; and

a ~~healing~~ cap including a body portion having a proximal and a distal end, the body portion defining an inner cavity which is sized and adapted so that the ~~healing~~ cap fits over the final restoration portion, ~~the healing cap further including a tissue retention flange at the distal end that extends below the shoulder portion when the healing cap is coupled to the abutment portion.~~

2. **(Canceled)**

3. **(Original)** The dental implant system of Claim 1, wherein the body portion and the abutment portion of the implant are machined from a single piece of material.

4. **(Currently amended)** The dental implant system of Claim 1, wherein ~~the cap further includes a tissue retention flange at the distal end that extends below the shoulder portion when the healing cap is coupled to the abutment portion the tissue retraction flange also extends away from the flared portion.~~

5. **(Currently amended)** The dental implant system of Claim [[1]] 4, wherein ~~the tissue retraction flange also extends away from the flared portion forming a gap is formed between the tissue retraction flange and the flared portion.~~

6. **(Currently amended)** The dental implant system of Claim 1, wherein the body portion of the ~~healing~~ cap includes a base portion that is configured to rest at least partially on the shoulder portion of the abutment portion.

Appl. No. : 10/748,869
Filed : December 30, 2003

7. **(Original)** The dental implant system of Claim 1, wherein the body portion includes a bone apposition surface.

8. **(Currently amended)** The dental implant system of Claim 1, wherein the ~~healing~~ cap is white.

9. **(Currently amended)** The dental implant system of Claim 1, wherein the healing cap has a color that is substantially the same a natural tooth.

10. **(Currently amended)** The dental implant system of Claim 1, wherein the abutment portion and the ~~healing~~ cap have round cross-sections.

11. **(Currently amended)** The dental implant system of Claim 1, wherein the abutment portion and the ~~healing~~ cap have non-round cross-sections.

12-17. **(Canceled)**

18. **(Original)** The dental implant system of Claim 1, in combination with a coping for creating a final restoration, the coping comprising a body portion having a proximal end, a distal end and an inner surface that defines an internal cavity and at least one standoff that extends from the inner surface towards a center of the internal cavity.

19. **(Original)** The dental implant system of Claim 18, wherein the at least one standoff extends at least about 25 microns from the inner surface.

20. **(Original)** The dental implant system of Claim 19, wherein the at least one standoff extends less than about 50 microns from the inner surface.

21. **(Original)** The dental implant system of Claim 18, wherein the coping is made of a material that can be melted and removed from a mold during an investment casting process.

22. **(Original)** The dental implant system of Claim 21, wherein the coping is made of plastic.

23. **(Original)** The dental implant system of Claim 22, wherein the coping is made from a material that is suitable for forming a portion of the final restoration.

24. **(Original)** The dental implant system of Claim 23, wherein the coping is made of gold.

25. **(Original)** The dental implant system of Claim 23, wherein the coping is made of a ceramic material.

Appl. No. : 10/748,869
Filed : December 30, 2003

26. **(Original)** The dental implant system of Claim 18, wherein the at least one standoff has a tapered shape.

27. **(Original)** The dental implant system of Claim 18, further comprising a flanged region that configured to rest upon a shoulder of a final abutment.

28. **(Currently amended)** A method for installing a prosthetic tooth, comprising the steps of:

inserting a distal end of a body portion of a single stage dental implant having a body portion, an abutment portion and an internal bore having ~~including [[an]]~~ a notch into a patient's jawbone ~~during a first stage surgery~~;;

engaging a lever arm or prong of a mating component to the notch in the internal bore to releaseably couple a mating component to the dental implant[[,]];;

coupling a healing cap to the abutment portion ~~such that the abutment portion is positioned within an internal cavity of the healing cap, during first stage surgery, such that a tissue retraction flange of the healing cap extends below a shoulder portion of the abutment portion;~~ and

removing the healing cap from the abutment portion ~~during a second stage surgery~~, and

~~taking an impression of the abutment portion after the healing cap has been removed from the abutment portion.~~

29. **(Currently amended)** A method as in Claim 28, wherein the step of coupling a healing cap to an abutment portion ~~of the combination~~, further includes using a healing cap screw to couple the healing cap to the abutment portion.

30. **(Original)** A method as in Claim 28, further comprising providing an impression cap with an injection port and a plurality of vent holes; positioning the impression cap onto the abutment portion of the implant; and injecting a first impression material into the impression cap through the injection port until the first impression material is extruded through at least one of the vent holes.

31. **(Original)** A method as in Claim 30, wherein the step of positioning the impression cap onto the abutment portion includes snapping the impression cap onto the shoulder of the abutment portion.

Appl. No. : **10/748,869**
Filed : **December 30, 2003**

32. **(Original)** A method as in Claim 30, further including the steps of taking an impression of the patient's mouth by placing an impression tray filed with a second impression material over the impression cap and removing the impression tray and the impression cap from the patient's mouth.

33. **(Original)** A method as in Claim 30, further including modifying the shape of the abutment portion.

34. **(Original)** A method as in Claim 30, wherein the step of injecting the first impression material into the impression cap includes inserting a tip of a syringe filled with the first impression material into the injection port of the impression cap.

35. **(Original)** A method as in Claim 28, further comprising:

providing a coping having a body portion that comprises a proximal end, a distal end and an inner surface that defines an internal cavity and at least one standoff that extends from the inner surface towards a center of the internal cavity;

providing an analogue of the abutment portion of the dental implant,

placing the coping over the analogue;

applying a material suitable for investment casting to an outer surface of the coping;

encasing the coping and the material suitable for investment casting in an investment material;

melting the coping and the material suitable for investment casting;

removing the coping and the material suitable for investment casting from the investment material; and

filling a cavity within the investment material with a material suitable for forming a part of a final restoration.